

Statement of Considerations

REQUEST BY SMITH INTERNATIONAL, INC. FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS IN SUBJECT INVENTIONS MADE IN THE COURSE OF OR UNDER DEPARTMENT OF ENERGY CONTRACT NO. DE- AC21-92MC28182, PHASE II; DOE WAIVER DOCKET W(A)- 96-019 [ORO-635]

Smith International, Inc. has made a timely request for an advance waiver of worldwide rights in Subject Inventions made in the course of or under Phase II of Department of Energy (DOE) Contract No. DE-AC21-92MC28182. The scope of the work calls for the development, testing and tool hardening of a slim hole percussion air directional drilling system to be used with both conventional drill pipe and coiled tubing. The work is sponsored by the Office of Fossil Energy.

The total value (including in-kind contributions) of Phase II of the contract is \$1,926,862, including an optional third year. Smith International is cost sharing 50% or \$963,418 of this phase of the contract.

Smith is a major player in the oil and gas industry, and the pioneer in introducing air percussion drilling technology to the oil and gas industry. Smith introduced the use of diamond-enhanced-insert hammer bits to the industry in 1987. Since that time, it has performed extensive research in the use of downhole percussion hammers for directional drilling applications, resulting in numerous patents and technical publications in the area. Therefore, Smith's experience and expertise will contribute substantially to commercialization of the inventions made under the contract.

Through sales of diamond-enhanced hammer bits and the rental of downhole hammer tools, Smith has a 20% share of the \$15,000,000 annual percussion air drilling market in the oil and gas industry. Considering its market position, it has the capability to commercialize the drilling system being developed under the contract. Smith's strength in worldwide marketing should ensure speedy industry-wide commercialization of this drilling technology.


The contract has been executed and is proceeding with the standard DEAR 927.300(a), Patent Rights - Long Form clause. If the requested waiver is approved, the Patent Rights - Long Form clause will be replaced by the 10 CFR 784.12, Patent Rights - Waiver clause as a no-cost modification to the contract. Petitioner has approved the Patent Rights - Waiver terms and conditions, including march-in rights, the granting of licenses to background patents necessary for practicing subject inventions, retention by the government of a license, preference for U.S. industry, and a U.S. competitiveness clause.

Smith agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States, unless Smith can show to the satisfaction of DOE that it is not commercially feasible to do so. Further, Smith has agreed to make the above condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees.

Granting of the waiver should have little effect on competition since there are several technology options, this being one of many previously or yet-to-be developed in the marketplace, therefore there should not be undue market concentration of these air directional drilling systems. Further, granting of the waiver will not place Smith in a dominant or preferred position in the field because the drilling system being developed has limited applications and so the market will generally continue with the currently available products.

Grant of the requested waiver should serve as encouragement to other DOE contractors that significant cost sharing will be recognized as an acceptable consideration for granting greater rights in Subject Inventions.

In view of the acceptable level of cost sharing by Smith International and the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver for worldwide rights be granted.


Lisa A. Jarr
Attorney

Based on the foregoing Statement of Considerations and the representations in the attached Waiver Petition, it is determined that the interest of the United States and the general public will best be served by a waiver of U.S. and foreign patent rights, and therefore, the waiver is granted. This waiver shall not apply to a modification or extension of the cost-shared contract where, through such a modification or extension, the purpose, scope or cost of the contract has been substantially altered.

CONCURRENCE:

[REDACTED]

Sandra L. Waisley
Deputy Assistant Secretary
Office of Natural Gas and
Petroleum Technology

Date:

9/4/97

APPROVAL:

[REDACTED]

Paul A. Gottlieb
Assistant General Counsel for Technology
Transfer and Intellectual Property

Date:

9-4-97

(iii) Establishes that the failure to disclose did not result from the Contractor's fault or negligence.

(3) Pending written assignment of the patent application and patents on a subject invention determined by the Contracting Officer to be forfeited (such determination to be a Final Decision under the Disputes clause of this contract), the Contractor shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Government. The forfeiture provision of this paragraph shall be in addition to and shall not supersede any other rights and remedies which the Government may have with respect to subject inventions.

(t) *U.S. Competitiveness.* The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States, unless the Contractor can show to the satisfaction of DOE that it is not commercially feasible to do so. The Contractor further agrees to make the above condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees.